Exemption No. 6541B Regulatory Docket No. 28673

July 30, 1999

Mr. John W. Harrington Wilson, Elser, Moskowitz, Edelman & Dicker LLP 120 North LaSalle Street Chicago, IL 60602

Dear Mr. Harrington:

This is in response to your May 5, 1999, letter petitioning the Federal Aviation Administration (FAA) on behalf of the EAA Aviation Foundation, Inc. and the Experimental Aircraft Association, Inc. (collectively to be referred hereafter as EAA), for an amendment to Exemption No. 6541, as amended. That exemption from Sections 91.315, 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations (14 CFR) permits EAA to operate its Boeing B-17 (B-17) aircraft, which is certificated in the limited category, for the purpose of carrying its members for compensation or hire in its former military vintage airplane on local flights for educational and historical purposes. The amendment you request would revise condition Nos. 13(c) and (d) to allow flight operations with a minimum flight visibility of not less than 3 statute miles and with a minimum ceiling of not less than 1,500 feet above ground level (AGL), respectively.

In your petition, you indicate that the conditions and reasons regarding public interest and safety, presented in the original petition upon which the exemption was granted, remain unchanged.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested amendment to the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to EAA.

The FAA has determined that the justification for the issuance of Exemption No. 6541, as amended, remains valid with respect to this exemption. Further, the FAA finds that revising condition Nos. 13(c) and (d), as requested, will accommodate EAA's operations without adversely affecting safety. Finally, the FAA notes that minor editorial changes have been made to the conditions and limitations of Exemption No. 6541, as amended.

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. Sections 40113 and 44701, delegated to me by the Administrator (14 CFR Section 11.53),

Exemption No. 6541, as amended, is hereby further amended by (1) revising condition No. 13(c) to allow flight operations with a minimum flight visibility of not less than 3 statute miles, (2) revising condition No. 13(d) to allow flight operations with a minimum ceiling of not less than 1,500 feet AGL, and (3) extending its October 31, 2000, termination date to October 31, 2001, unless sooner superseded or rescinded. This exemption is subject to the following revised conditions and limitations:

- 1. EAA must maintain its B-17 aircraft in accordance with the
  - a. Maintenance requirements as specified in its B-17's type specification sheet, as amended;
  - b. FAA-approved maintenance inspection program that meets the requirements of Section 91.409; and
  - c. B-17 military technical manuals.
- 2. The pilot-in-command (PIC) must
  - a. Hold at least a commercial pilot certificate with a multiengine airplane rating, an airplane instrument rating, and a B-17 type rating;
  - b. Have completed EAA's B-17 qualification and recurrent flight- and ground-training program within the previous 12 calendar months;
  - c. Have at least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine airplanes, and 25 hours in a B-17; or have at least a total of 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine airplanes, and 100 hours and 50 takeoffs and 50 landings in a B-17; and
  - d. Have accomplished three takeoffs and three landings to a full stop in a B-17 within the previous 90 days before serving as PIC.
- 3. The second-in-command (SIC) must
  - a. Hold at least a commercial pilot certificate with a multiengine airplane rating and an airplane instrument rating;
  - b. Have completed EAA's B-17 qualification and recurrent flight- and ground-training program within the previous 12 calendar months;

- c. Have at least a total of 1,500 hours of aeronautical flight experience, 250 hours of aeronautical flight experience in multiengine airplanes; or have at least a total of 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in multiengine airplanes, and 25 hours and 10 takeoffs and 10 landings in a B-17; and
- d. Have accomplished three takeoffs and three landings to a full stop in a B-17 within the previous 90 days before serving as SIC.
- 4. EAA must develop and maintain a written B-17 qualification and recurrent ground-training program for its PICs and SICs that covers the training subjects listed below. Each PIC and SIC must receive this training and be found competent and proficient on the following:
  - a. General information and description of the airplane;
  - b. Aircraft limitations;
  - c. Aircraft servicing;
  - d. Airspeeds;
  - e. Fuel system;
  - f. Electrical system;
  - g. Hydraulic system;
  - h. Engines;
  - i. Instruments and avionics;
  - j. Landing gear, brakes, controls, and flaps systems;
  - k. Propeller;
  - 1. Emergency procedures, including -
    - (i) Instruction in emergency assignments and procedures, including coordination among crewmembers;
    - (ii) Individual instruction in the location, function, and operation of emergency equipment, including -

- A. First aid equipment and its proper use; and
- B. Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires;
- (iii) Instruction in the handling of emergency situations, including -
  - A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and
  - B. Illness, injury, or other abnormal situations involving passengers or crewmembers;
- m. Weight and balance;
- n. Performance planning; and
- o. Use of the airplane's checklist.
- 5. EAA must develop and maintain a written B-17 qualification and recurrent flight-training program for its PICs that covers the areas of operations and tasks listed in the "Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Airplane," FAA-S-8081-5C, and each PIC must receive this training and be found competent and proficient on those areas of operation and tasks before being assigned PIC responsibilities and duties.
- 6. EAA must develop and maintain a written B-17 qualification and recurrent flight training program for its SICs that covers the maneuvers and procedures listed below. Each SIC must receive this training and be found competent and proficient on the following maneuvers and procedures before being assigned SIC responsibilities and duties:
  - a. Operational procedures applicable to the powerplant, equipment, and systems;
  - b. Performance specifications and limitations;
  - c. Normal, abnormal, and emergency operating procedures;
  - d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;

- e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
- f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

- 7. Each PIC must complete a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial qualification training program) that covers the areas of operations and tasks listed in "Airline Transport Pilot and Aircraft Type Rating Practical Test Standards for Airplane," FAA-S-8081-5C. Each PIC must be found competent and proficient on those areas of operation and tasks before being assigned PIC duties and responsibilities.
- 8. Each SIC must complete a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial qualification training program) that covers the following maneuvers and procedures before being assigned SIC responsibilities and duties:
  - a. Operational procedures applicable to the powerplant, equipment, and systems;
  - b. Performance specifications and limitations;
  - c. Normal, abnormal, and emergency operating procedures;
  - d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
  - e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
  - f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

9. EAA's B-17 qualification and recurrent ground and flight training programs listed in condition Nos. 4, 5, and 6, as appropriate, must be made available to the Milwaukee Flight Standards District Office (GL FSDO No. 13) upon request.

- 10. EAA must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
- 11. EAA will maintain the following information and records and will make those records available for review to the FAA when requested:
  - a. The name of each pilot crewmember EAA authorizes to conduct flight operations in its airplanes under the terms of this exemption;
  - b. Copies of each PIC's and SIC's pilot certificate, medical certificate, qualifications, and recurrent training documentation in the B-17 to demonstrate compliance with condition Nos. 2 and 3;
  - c. Records of maintenance performed and maintenance inspection records to demonstrate compliance with condition No. 1; and
  - d. A listing of any incident, accident, or mechanical failure of the airframe, propellers, or engine that occur during this exemption. That listing will include the date of the incident, accident, or failure; all information on the possible cause factors; and extent of injuries sustained.
- 12. Before permitting a person to be carried on board its airplane for the purposes authorized under this exemption, EAA will inform that person that its airplane holds a limited airworthiness certificate; the significance of a limited airworthiness certificate as compared to a standard airworthiness certificate; and that the FAA has authorized this flight under a grant of exemption from the requirements of Sections 91.315, 119.5(g), and 119.21(a). The explanation of the significance of a limited airworthiness certificate compared to a standard airworthiness certificate must include at least the following information:
  - a. The FAA has not established nor has it approved limited category airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.
  - b. Limited category airworthiness certificates are issued when the FAA finds the aircraft -

- (i) Has been previously issued a limited category type certificate and the aircraft conforms to that type certificate; and
- (ii) To be in a good state of preservation and repair and is in a safe operating condition.
- c. Standard category airworthiness certificates are issued when the FAA finds the -
  - (i) Aircraft has been built and maintained in accordance with that aircraft's type certification standards as established by the FAA; and
  - (ii) Aircraft's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
- 13. All flight operations must be conducted
  - a. At a minimum operating altitude of not less than 1,000 feet AGL;
  - b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;
  - c. With a minimum flight visibility of not less than 3 statute miles;
  - d. With a minimum ceiling of not less than 1,500 feet AGL;
  - e. Within a 50-nautical-mile radius of the departure airport with landing only permitted at that departure airport; and
  - f. At an airport that has a fire station or firefighting services available.
- 14. No persons other than the assigned flight crewmembers may be permitted on the flight deck of the airplane during flight operations.
- 15. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of approved seats in the aircraft.
- 16. Except for an emergency locator transmitter, EAA's airplanes must have the equipment listed in Section 91.205(b), and that equipment must be in an operable

condition during the flight.

- 17. If the airplane is to be operated overwater and beyond the power-off gliding distance from shore, EAA's airplanes must have the equipment listed in Section 91.205(b)(12), and that equipment must be in an operable condition during the flight.
- 18. EAA must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a Section 501(c)(3) nonprofit, tax-exempt, charitable organization under Sections 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.

This letter shall be attached to, and is a part of, Exemption No. 6541.

Sincerely,

/s/ Ava L. Mims
Acting Director, Flight Standards Service